



Spartan Chemical

RA Prioritization Panel Meeting

March 2012



Background

- From 1952 to 1992, the Spartan Chemical Company operated as a bulk chemical transfer, blending, and repackaging plant. The company handled a variety of chemicals
- Numerous spills occurred from 1963 through 1990.
- Spartan Chemical site vacant since 1992.
- Michigan DEQ has been conducting site investigations and contaminated groundwater cleanup since 1984.
- Final Record of Decision (ROD) issued by USEPA in 2007
- Michigan DEQ finalizing the designs.

Property Summary

- 2539 28th Street Wyoming, Kent County
- Kent County owns property (tax reversion).
- Property is 5 acres in size and fenced. Northern 2/3 is “open” land, Southern 1/3 was industrial. Two buildings and foundations remain.
- Municipal water/sanitary sewer in area.
- No private wells known to exist near property.
- Groundwater use and soil management deed restrictions are in place.
- Site is being monitored (groundwater sampling) and Remedial Designs are underway.



2007 Selected Remedy

- Soil Removal
- In-Situ Chemical Oxidation (ISCO)
- Air Sparge/ Soil Vapor Extraction (AS/SVE)
- Enhanced In-Situ Bioremediation (EISB)
- Monitored Natural Attenuation (MNA)
- Groundwater Monitoring
- Vapor Intrusion Assessment

LEGEND

- ESTIMATED EXTENT OF VOCs IN GROUNDWATER EXCEEDING DRINKING WATER CRITERIA (RDWC) *
- ESTIMATED EXTENT OF VOCs IN GROUNDWATER EXCEEDING GROUNDWATER SURFACE WATER INTERFACE (GSI) *
- GREY SHADOWED MONITORING WELLS ARE NOT INCLUDED IN TOTAL VOC CONCENTRATIONS
- SOLID SHADOWED MONITORING WELLS ARE SHALLOW SCREENED MONITORING WELLS
- * Not depth specific - includes exceedance in any interval (shallow, intermediate, or deep-screened wells)

SCALE: 1" = 200'

WESTON SOLUTIONS

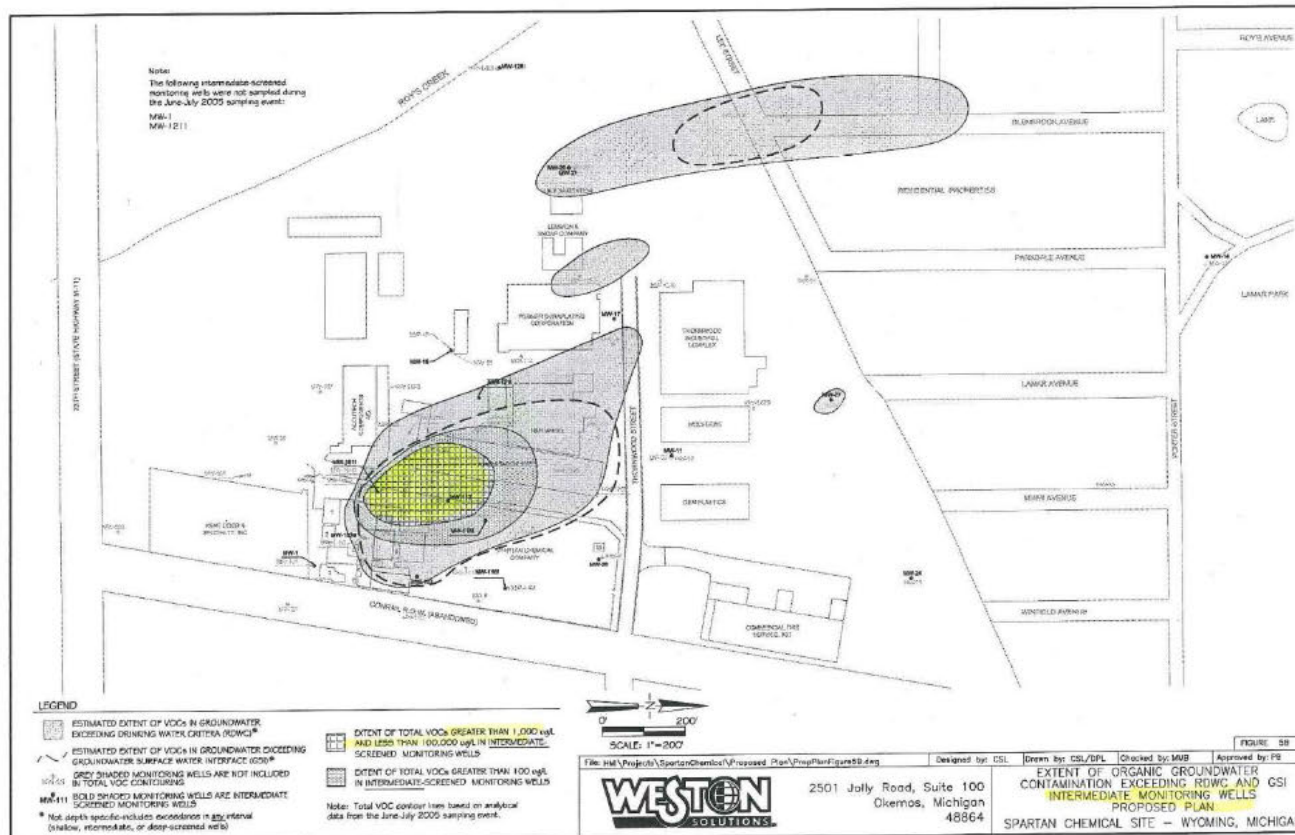
FILE: H:\Projects\SpartanChemical\Proposed Plant\PropPlantFigureSL.dwg **Designed by:** CSM **Drawn by:** GSK/BPL **Checked by:** MMS **Approved by:** PR

**2501 Jolly Road, Suite 100
Okemos, Michigan
48864**

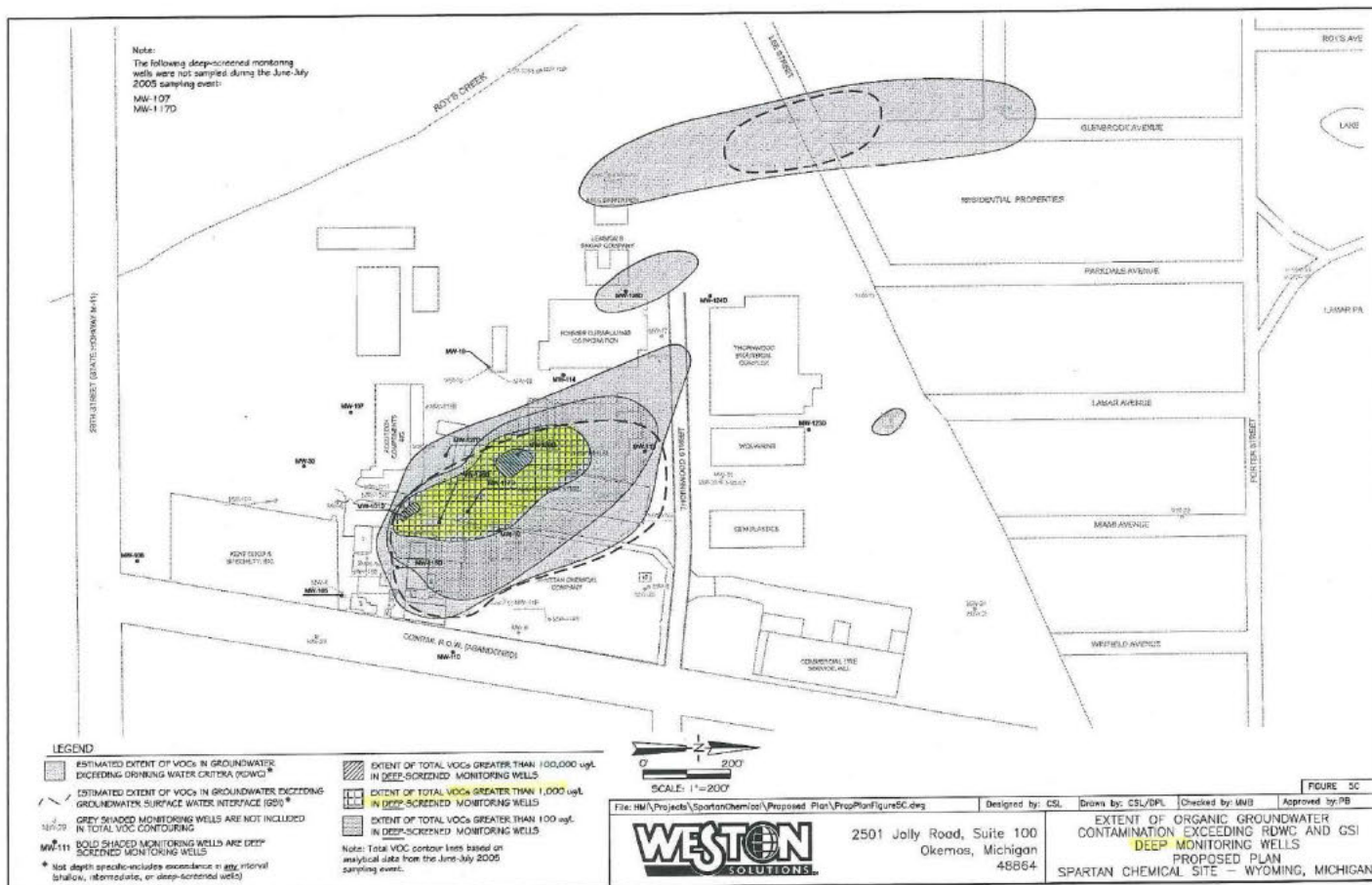
**EXTENT OF ORGANIC GROUNDWATER CONTAMINATION EXCEEDING RDWC AND GSI
SHALLOW MONITORING WELLS**

**PROPOSED PLANT
SPARTAN CHEMICAL SITE - WYOMUNG, MICHIGAN**

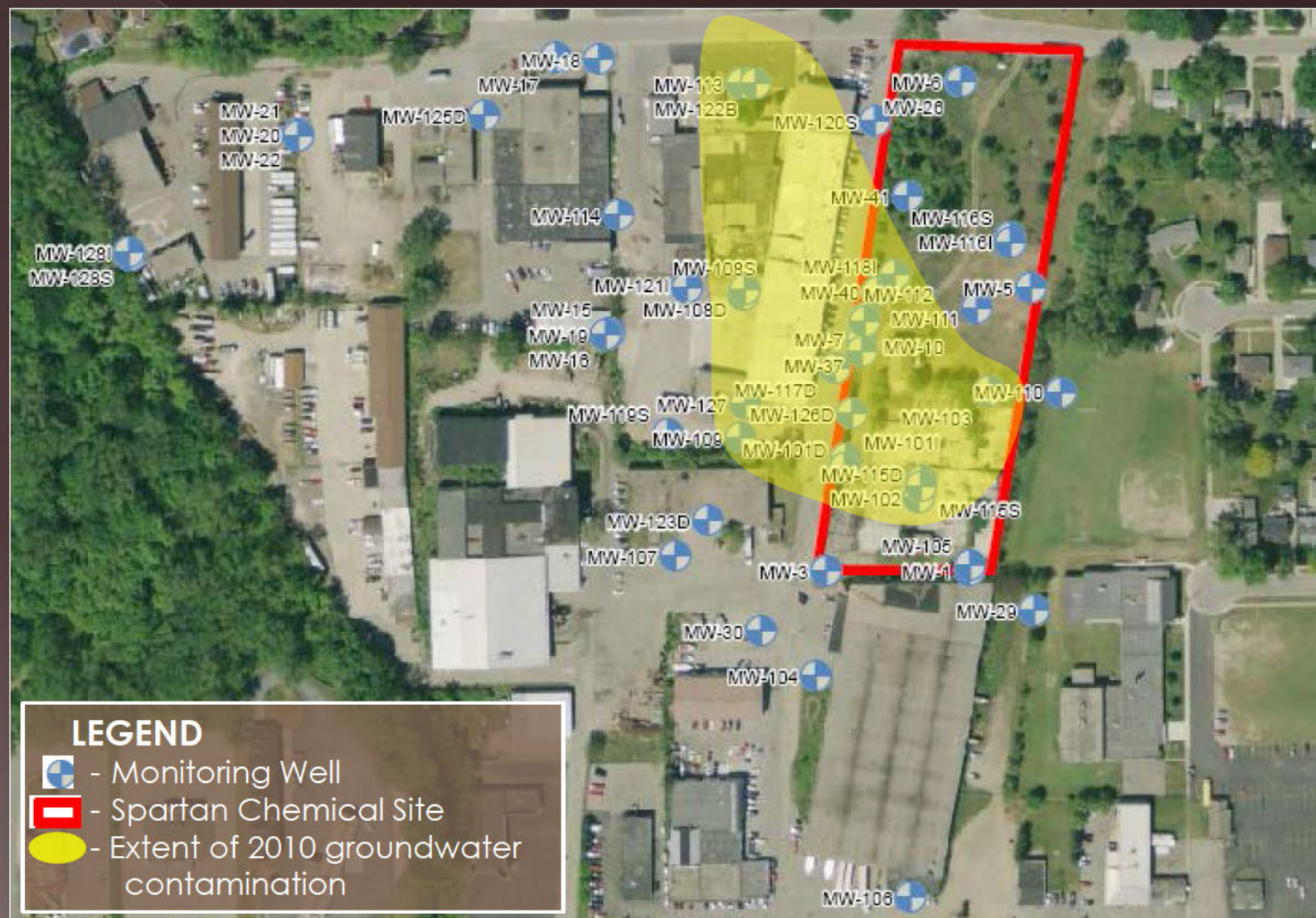
Intermediate VOC Plume



Deep VOC Plume



Potential Vapor Intrusion Areas - South






Potential Vapor Intrusion Areas - North



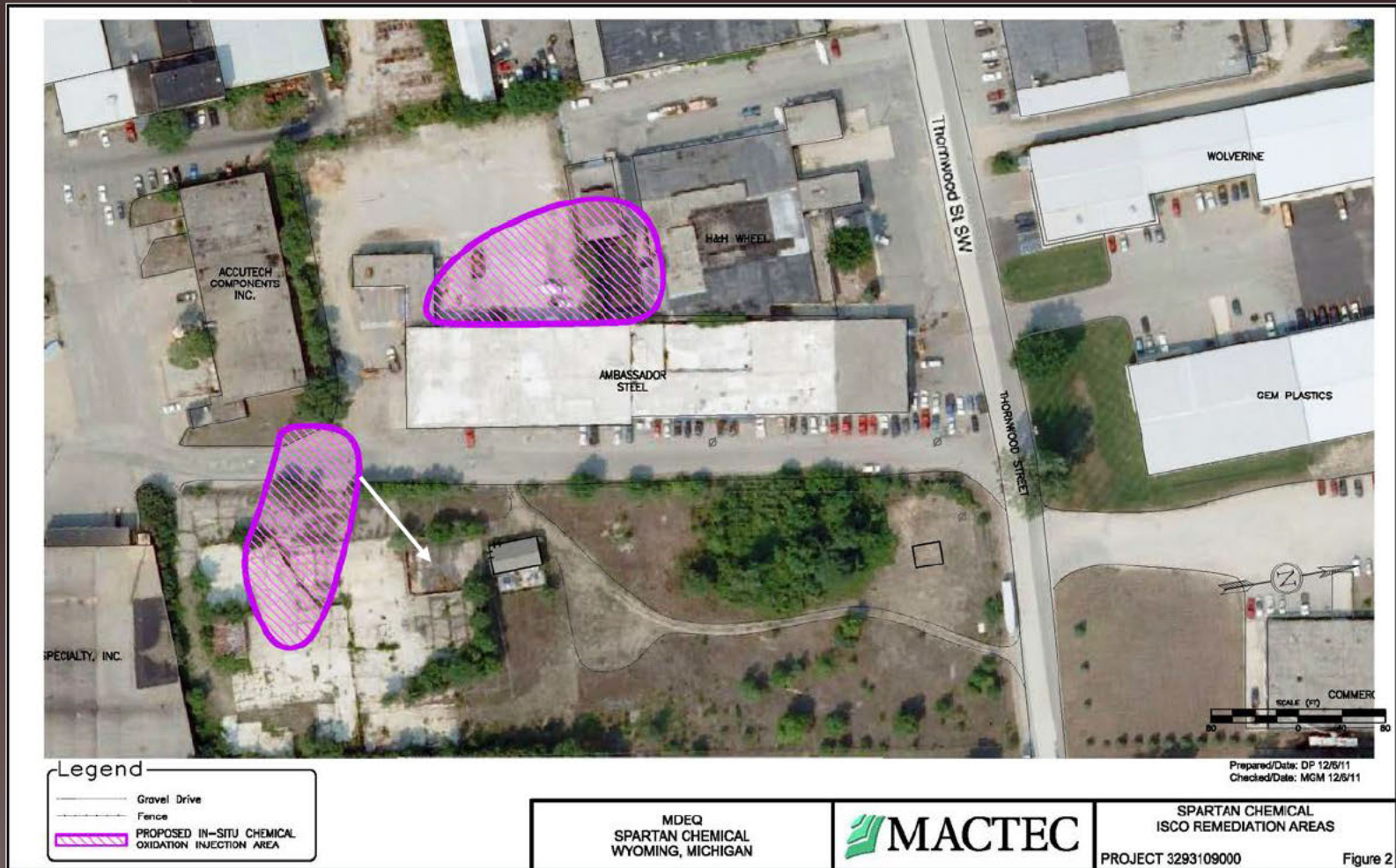
LEGEND

- CONCEPTUAL TOP OF EXCAVATION
- CONCRETE PAD - TIER 1 (APPROXIMATELY 0 TO 5 FEET BELOW GRADE)

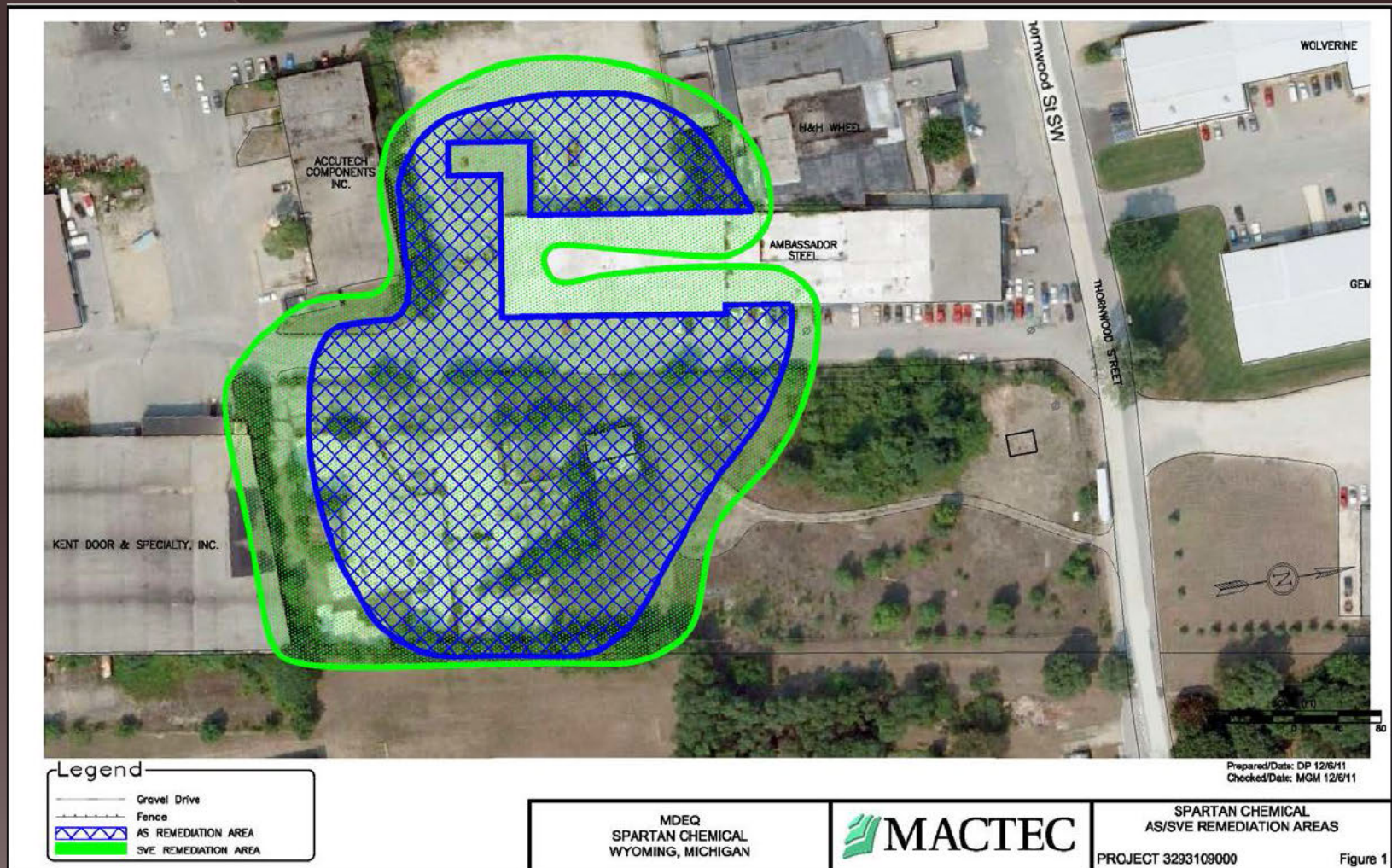
 CONCEPTUAL TOP OF EXCAVATION
 PROPOSED FLOOR OF EXCAVATION
 VAPOR EXTRACTION WELL
 VAPOR MONITORING POINT

- | | |
|---|---|
|  | CONCRETE PAD - TIER 1 (APPROXIMATELY 0 TO 5 FEET BELOW GRADE) |
|  | CONCRETE PAD - TIER 1B (APPROXIMATELY 0 TO 1.25 FEET ABOVE GRADE) |
|  | CONCRETE PAD - TIER 2 (APPROXIMATELY 0 TO 5 FEET ABOVE GRADE) |
|  | CONCRETE PAD - TIER 3 (APPROXIMATELY 0 TO 7 FEET ABOVE GRADE) |

ISCO Remediation Areas



AS/SVE Remediation Areas



Site Factors for Consideration

- Elevated concentrations of VOCs, arsenic and lead at the surface
- Trespassing by students occurs with regularity
- Potential VI Problems
- Municipal Water Currently Available to Residents
- Final Actions for Site
 - CC and HEUC
- No Eco Threats